

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A method of heat treating a turbine rotor disk varying in cross sectional shape from a relatively thick radially inner portion to a relatively thinner radially outer portion to obtain different radial properties at different radial locations in the rotor disk comprising:

- a) heating the rotor disk for a period of from 4 to 10 hours at a temperature of 1800°F;
- b) cooling the rotor disk to a temperature of about 1550°F at a rate of from 1° to 5°F/min;
- c) holding the rotor disk at a stabilization temperature of about 1550°F for a period of from about 2 to about 4 hours such that radially outer portions of the disk are exposed to said stabilization temperature for longer periods of time than radially inner portions of the rotor disk;
- d) cooling the rotor disk to room temperature at a rate of 20° - 40°F/min;
- e) precipitation aging the rotor disk by heating the rotor disk to temperature of 1325°F for 8 hours, and
- f) cooling the rotor disk;

wherein creep and creep crack growth resistance are enhanced at radially outer locations of the rotor disk and strength is enhanced at radially inner locations of the rotor disk.

2. (Original) The method of claim 1 wherein step a) is carried out for 4 hours.

3. (Canceled)

4. (Original) The method of claim 1 wherein step c) is carried out for 2 hours.

5. (Canceled)

6. (Previously Presented) The method of claim 1 wherein step d) is carried out by cooling the rotor disk at a rate of about 25°F/min.

7. (Original) The method of claim 1 wherein step f) is carried out by furnace cooling the rotor disk at a rate of 100°F/hour to 1150°F, holding it at 1150°F for 8 hours and then air cooling the rotor disk to room temperature.

8-19. (Canceled)